# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/913,484 | 11/20/2001 | Vasco Vollmer | 10191/1963 | 2532 |

26646      7590      10/04/2005

KENYON & KENYON
ONE BROADWAY
NEW YORK, NY  10004

| EXAMINER |
|---|
| BATES, KEVIN T |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2155 | |

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

| Office Action Summary | Application No. | Applicant(s) |
|---|---|---|
| | 09/913,484 | VOLLMER ET AL. |
| | Examiner | Art Unit |
| | Kevin Bates | 2155 |

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)☒ Responsive to communication(s) filed on *20 November 2001*.

2a)☐ This action is **FINAL**.  2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)☒ Claim(s) *13-25* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *13-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

## Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All  b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

## DETAILED ACTION

This Office Action is in response to a preliminary amendment received on

November 20, 2001.

The Information Disclosure Statement was received on August 15, 2001 and has

been considered.

The Foreign Priority Documents have been received on August 15, 2001.

Claims 1-12 have been cancelled.

Claims 13- 25 are pending in this application.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 13 – 25 are rejected under 35 U.S.C. 102(e) as being anticipated by**

**Ketcham (6721334).**

**Regarding claim 13**, Ketcham teaches a method of effective utilization of data

packets of differing capacity, comprising:

exchanging user data packets and control data packets (Figure 1, element 124)

between a master station and subscribers, the user data packets having a data capacity

which is a multiple of a data capacity of the control data packets (Column 2, lines 62 –

67, where there are packets and they can be multiply fit into a maximum packet size;

Column 10, lines 1 – 4, an Nth multiple);

filling at least some containers for the user data packets each with a plurality of

control data packets in a transmission frame (Column 2, lines 61 – 67) according to an

agreement between the master station and at least one of the subscribers (Column 3,

lines 14 – 21), the agreement stipulating which of the containers for the user data

packets are filled with control data packets, the control data packets which are stored in

the containers for the user data packets being combined in a sub-frame, an external

format of the sub-frame being adapted to a format of the user data packets (Column 3,

lines 1 – 6); and

transferring the user data packets and the control data packets between the

master station and the subscribers in a communications system having frame-oriented

transmission (Column 7, lines 53 – 61).

**Regarding claim 14**, Ketcham teaches the method according to claim 13, further

comprising: announcing the agreement by transmitting an announcement in a control

data packet in advance of transferring the containers for the user data packets filled with

control data packets (Column 3, lines 14 – 21).

**Regarding claim 15**, Ketcham teaches the method according to claim 13, further

comprising: announcing the agreement using an announcement in a header field of the

containers for the user data packet filled with control data packets (Column 3, lines 1 –

6).

**Regarding claim 16**, Ketcham teaches the method according to claim 13, further

comprising: making the agreement by transmitting a request signal from the at least

one of the subscribers to the master station (Column 3, lines 14 – 21).

**Regarding claim 17**, Ketcham teaches the method according to claim 13, further

comprising: assigning to one of the subscribers by the master station a container for

user data packets for transmission of control data packets after a predetermined

number of requests for control data packets by the one of the subscribers (Column 9,

lines 40 – 51; Column 3, lines 17 – 19; where the response packet tells the system to

send aggregate packets).

**Regarding claim 18**, Ketcham teaches the method according to claim 13, further

comprising: transmitting information regarding at least one of a type and a content of

subsequent containers for user data packets tilled with control data packets using at

least a portion of a control data packet (Column 3, lines 1 – 6).

**Regarding claim 19**, Ketcham teaches the method according to claim 18, further

comprising: storing an information element in the at least the part of the control data

packet, the information element containing information about a number of occupied

fields for control data packets within a subsequent container for user data packets

(Column 3, lines 1 – 6).

**Regarding claim 20**, Ketcham teaches the method according to claim 13, further

comprising: indicating information regarding a position of one of the containers for user

data packets which is filled with control data packets within a block of user data packets

using at least a portion of a control data packet (Column 3, lines 1 – 6).

**Regarding claim 21**, Ketcham teaches the method according to claim 13, further comprising: arranging each of the containers for user data packets which is filled with control data packets in a predetermined position within a respective block of cohesive user data packets (Column 7, lines 53 – 59, where the system is designed to identify packets which can be aggregated and sends them before packets which are too large to be aggregated).

**Regarding claim 22**, Ketcham teaches the method according to claim 21, wherein each of the containers for the user data packets which are filled with control data packets is arranged at a beginning of the respective block of cohesive user data packets (Column 7, lines 53 – 59, where the system is designed to identify packets which can be aggregated and sends them before packets which are too large to be aggregated).

**Regarding claim 23**, Ketcham teaches the method according to claim 13, further comprising: storing an information element in a preceding control data packet for each container for user data packets which is filled with control data packets (Column 3, lines 1 – 6, where in the aggregated data packet has a header for identifying the contents of the aggregated packets).

**Regarding claim 24**, Ketcham teaches a master station for a communications system having a frame-oriented transmission of data packets of differing capacity between the master station and subscribers, the master station allocating communications resources in a form of data packets for the subscribers, the subscribers

requesting the communications resources from the master station (Abstract), the master

station comprising:

a frame generator configured to predefine a transmission frame (Figures 5 – 7);

a multiplexer configured to insert control data packets and user data packets into

the predefined transmission frame (Column 2, lines 61 – 67), a data capacity of the user

data packets being a multiple of a data capacity of the control data packets (Column 2,

lines 62 – 67, where there are packets and they can be multiply fit into a maximum

packet size; Column 10, lines 1 – 4, an Nth multiple);

a selection unit configured to determine, based on an agreement between the

master station and at least one of the subscribers, whether containers for user data

packets within the transmission frame are filled with control data packets (Column 3,

lines 14 – 21; lines 1 – 6); and

a de-multiplexer configured to separate user data packets and control data

packets transmitted in a transmission frame and configured to send the separated user

data packets and control data packets to the selection unit (Column 8, lines 19 – 22).

Regarding claim 25, Ketcham teaches a subscriber device for a communications

system having frame-oriented transmission of data packets of differing capacity

between a master station and subscribes, the master station allocating communications

resources in a form of data packets for the subscribers, the subscribers requesting the

communications resources from the master station (Abstract), the describer device

comprising:

a de-multiplexer configured to separate user data packets and control data

packets from a transmission frame transmitted by the master station and configured to

send the separated user data packets and control data packets to an analyzer unit

(Column 7, lines 53 – 57);

a multiplexer configured to insert subscriber-side control data packets and user

data packets into a transmission frame predefined by the master station, the user data

packets having a data capacity that is a multiple of a data capacity of the control data

packets (Column 2, lines 62 – 67, where there are packets and they can be multiply fit

into a maximum packet size; Column 10, lines 1 – 4, an Nth multiple); and

a selecting unit configured to determined whether containers for user data

packets are filled with a plurality of control data packets within the transmission frame

based on an agreement between the master station and the subscriber device (Column

3, lines 14 – 21; lines 1 – 6).

## *Prior Art*

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

U. S. Patent No. 6483804 issued to Muller, because it discloses packet batching.

U. S. Patent No. 6094671 issued to Chase, because it discloses aggregating

types of packets together.

U. S. Patent No. 6407994 issued to Archer, because it discloses bundling

messages.

U. S. Patent No. 6438137 issued to Turner, because it discloses concatenating additional packet loads.

U. S. Patent No. 6389038 issued to Goldberg, because it discloses creating Super Packets, which are bundled packets being sent together to reduce overhead.

U. S. Patent No. 6614808 issued to Gopalakrishna, because it discloses aggregating packets into one larger packet.

U. S. Patent No. 6684317 issued to Wang, because it discloses combining packets into Super Packets.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Bates whose telephone number is (571) 272-3980. The examiner can normally be reached on 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
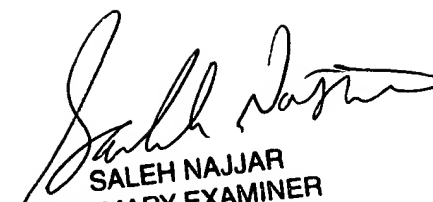
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KB

KB
September 27, 2005

SALEH NAJJAR
PRIMARY EXAMINER